

Abstract:

This paper will attempt to examine how the spread of mobile money in Afghanistan has affected the state of finance and banking for the average Afghan. While many actors have been involved in the overall development plan of the Afghan government, there are a limited number of actors in mobile money, allowing them to be examined closely. The research was approached with qualitative methods, examining the relationships between these actors, and in particular, the movement of risk through the financial system of mobile money. This research found that mobile money is not regulated to an appropriate degree, and that the concept presents a large amount of risk to Afghans using it. As the paper suggests, more emphasis should be placed within the Afghan government and the development sector on improving or emphasizing the hawala system of banking, as it is the least risky and a more sustainable form of banking for rural and urban Afghans.

Mobile Money and the Unbanked: Risk, Reward, and Branchless Banking in Afghanistan

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December 2012

General Honors Capstone

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Introduction

This paper will attempt to evaluate mobile money in Afghanistan, and how or if it has improved the daily life of the average Afghan. The problems that confront Afghans are well known to those that have taken even a cursory glance at the country within the last ten years. Economic and social growth stunted by years of warfare and government corruption, poor health, gender inequality, and inconsistent infrastructure plague the daily routine of this nation. These problems compound each other in a way that is baffling and crushing to an outsider looking in. Despite this, many have tried to do so. One can find an endless amount of non-profits, consulting firms, development groups, and international organizations operating throughout Afghanistan. And although they mean well, not all succeed in meeting the actual and unique needs of Afghan problems.

Since mobile money is in itself a development concept, it is important to examine how plans for development and rebuilding were formulated in the post-Taliban Afghanistan. The international effort to firstly eliminate the Taliban's presence, and then repair the country to a point of higher function has been challenging because of both the multitude of international actors and the lack of understanding of what could help improve Afghanistan the most. Because of the lack of direction and understanding among foreigners in Afghanistan in 2001, the country became a sandbox for development theorists. The mantra 'do something' rose above the mantra 'measure twice, cut once'. There has been at the same time, very little concern with the impact of both government and non-profit driven development in Afghanistan, and a great deal written about projects and ventures carried out there.

The US government alone has had an independent and bafflingly large role in Afghanistan's last decade of development. While its responsibility for security makes the United States military a stakeholder in the development process since security is necessary for most development programs, the US military is not a development organization. Instead the State Department and the Department of Defense, as well as other executive branch officials have pooled their resources and expertise to form a whole-of-government approach to the problems that Afghanistan faces. With this whole-of-government approach came the ability to control or influence most frameworks intended for Afghanistan. While the military presence in the country is international, and non-profits from around the world operate there, the United States government is able to enforce its opinions over those of other actors with the largest budget and the largest military force currently in Afghanistan. So it seems logical that pieces of American culture and thought can be found throughout Afghan reconstruction plans and frameworks, even those written by Afghans.

Capitalism and the survival of the free market were American priorities in the rebuilding of the Afghan Government, as was the revival of agrarian communities. And as a country that benefits from advanced telecommunications and financial infrastructure, it makes sense that westerners working on Afghan development would support the ideas that telecommunications and the opportunity to have a bank account can improve life for Afghans everywhere, regardless of occupation, age, or ethnicity. Subsequently, there was "major investment by the international private sector in telecommunications, including both mobile phones and internet

action”¹. The infrastructure required to make mobile money was not part of the grand quest to improve Afghanistan, but part of private investment occurring alongside improved security and increased western influences.

Telecommunications and banking may be essential parts of western trade, education, and government, but it is flawed logic to presume that mobile money is therefore an essential part of Afghanistan’s potential for trade, education, and government. Branchless banking through telecommunications needs to be approached in a more cautionary way, and traditional forms of communication, banking, and commerce need to be considered when developing a plan for Afghanistan’s future. This paper will attempt to identify the pitfalls and rewards of encouraging mobile money as an institution in Afghanistan, while first making these considerations.

The Problem

2001 saw the creation of the first functional, federal army in Afghanistan. Previously security had been enforced by local militias, foreign occupying militaries, and outside groups like Al-Qaeda and the Taliban. With the creation of a new military institution came several logistical challenges. One seeming basic challenge that has caused serious problems for the Afghan army is how to go about paying their soldiers. To demonstrate how this is challenging, this paper will reference a fictional but representative Afghan soldier. This soldier joined the Afghan National Army because he saw an opportunity for higher pay, education, and advancement of his country’s security and independence. He is paid on a quarterly basis by the

¹ Peter Mardsen. *Afghanistan: Aid, Armies & Empires*. London: I.B. Tauris, 2009, 124.

government, at a salary that has greatly improved both his and his family's quality of life. They depend on his income alone to maintain their quality of life. His family lives in Kandahar, but his unit has recently been relocated to Kabul. This soldier's family rarely leaves their home, as their local community is isolated by the surrounding terrain, and they have no family outside of Kandahar. So when the soldier receives his paycheck every quarter, he has several options. First, he can deposit the money in a Kabul bank, and give one of his family members access to his account, allowing them to withdraw money from their local branch of the same bank. However, the one branch in their region closed due to the nearby Taliban presence. The soldier could also withdraw the money and take it home the next time he has leave, but since his family depends on his income, it is impractical to keep the money from them for so long. The soldier could pay a hawala agent to deliver the money as his father and grandfather did before him, but hawalas operate on an honor system, and the roads in Kandahar are sometimes not even safe for the agents. Avoiding the drawbacks of all the previous options, the soldier abandons his post for two weeks when he receives his paycheck to transport it home to his family himself, ensuring that the money reaches them and his family has access to food, water, and electricity for the next three months.

This problem of salary and transport poses significant challenges to the newly-created Afghan Army. In an interview with Lieutenant Col. Shawn Lowry, a Marine Corps officer working in Afghanistan in 2012 as part of the transition and drawdown effort, Lt. Col. Lowry described soldiers leaving their post to transport funds as a significant challenge to American officers

trying to conduct training and coordination². It not only degrades security in the area, but frustrates Americans trying to work in the area. This all occurs in the context of an army that lacks strong recruitment, training, and experience. It is clear throughout many sectors of the Afghan government and civilian life that the secure transfer of funds would reduce corruption, increase production, and improve the functional capacity of many institutions and businesses.

Mobile money, therefore, provides a convenient and much sought-after solution to this problem. With mobile banking, all that the Afghan soldier needs to get his family their money is a cell phone for himself, a cell phone for his family, and an account with a cell phone service provider. He can have his paycheck arranged to be transferred to his mobile bank account, and then send the money to his family in a different region almost immediately. His family can then find a mobile money agent working for the company that manages his account, and cash his paycheck in their hometown. The soldier does not have to abandon his assignment; neither he nor his family have to travel, and his family gets almost immediate access to the money without any interference from middlemen. This seems entirely appealing to Americans working to improve Afghanistan. Taking in to account our own experience with banking and mobile phones, mobile banking is efficient, secure, and uses modern technology that in the west has proved reliable and sustainable. But this seemingly simple solution lacks scrutiny in several areas, including security, regulation, Afghan autonomy, and most importantly, a true need in Afghanistan for mobile money services.

² United States Marine Corps Lt. Col Shawn Lowry, interview by Megan Lowry, November 22, 2012.

The Unbanked

Mobile money is a solution in search of a problem. The solution begins with economic development theory and interest from the private sector. The “unbanked” is a term coined during the last decade to describe those living in developing countries without access to amenities provided by modern banking. These include the ability to obtain lines of credit, save, and use bank and debit cards instead of cash. This financial condition exists worldwide, extending even to very impoverished populations in the United States and Europe. There is, undoubtedly, a strong correlation between income and lack of access to banking services. Reasons for a lack of access to a bank account or financial services can also be generalized throughout the world. The phenomenon of the “unbanked” was examined in depth in 2012 by the World Bank, in a report entitled “Measuring Financial Inclusion: The Global Findex Database,” the most comprehensive study on the subject yet. According to the report,

Worldwide, by far the most common reason for not having a formal account—cited by 65 percent of adults without an account—is lack of enough money to use one. This speaks to the fact that having a formal account is not costless in most parts of the world and may be viewed as unnecessary by a person whose income stream is small or irregular. Other common reasons reported for not having an account are that banks or accounts are too expensive (cited by 25 percent of adults without a formal account) and that banks are too far away (cited by 20 percent).³

³ Asli Demirguc-Kunt and Leora Klapper, “Measuring Financial Inclusion: The Global Findex Database,” World Bank: Development Research Group, April 2012, 3.

These factors hold true for Afghanistan as well. Poverty is widespread, as the GDP per capita in 2011 was \$1000 US; meaning only eleven countries worldwide had a lower GDP per capita than Afghanistan⁴. Unless you are employed by the government, income is often infrequent and unpredictable, and fluxuates alongside the state of security and the larger economy. The Afghan economy also includes a large amount of illegitimate income from the opium trade. As the largest producer of opium in the world, Afghanistan's economy is significantly dependent on income from the drug trade.⁵ In 2006, more than 35% of Afghanistan's gross national product was income from illicit opium exports⁶. It is understandable, therefore, that many Afghans may also not use formal banking in order to avoid detection from drug enforcement bodies. Bank accounts are fairly inexpensive in Afghanistan, but there are few banking branches in rural areas, and so a bank being too far away poses a significant problem to Afghans. Even short trip in Afghanistan can be dangerous, due to the profusion of roadside bombs and improvised explosive devices, as well as illegitimate groups that control roadways⁷.

Those that number the "unbanked" in Afghanistan are often posed with additional challenges to the ones described in the World Bank's Findex report. Literacy and the ability to read contracts and banking documents poses a significant barrier to many in Afghanistan, considering only 43.1% of males, and 12.6% of females in Afghanistan are literate.⁸ The official

⁴ "Country Comparison: GDP Per Capita (PPP)," The World Factbook, 2012, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html> (accessed November 15).

⁵ "World Drug Report 2010," UN Office of Drugs and Crime, 2010, 38, http://www.unodc.org/documents/wdr/WDR_2010/World_Drug_Report_2010_lo-res.pdf (accessed 16 November 2012).

⁶ John A. Glaze, "Opium and Afghanistan: Reassessing U.S. Counternarcotics Strategy," Strategic Studies Institute, October 2007, 5, <http://www.strategicstudiesinstitute.army.mil/pdffiles/pub804.pdf> (accessed November 1, 2010).

⁷ Lowry

⁸ "Afghanistan," The World Factbook, November 21, 2012, <https://www.cia.gov/library/publications/the-world-factbook/geos/af.html> (accessed December 1).

language is Dari, and yet it is only spoken by 50% of the population.⁹ The rest is divided between Pashto, Turkmen, Uzbek, and over 30 other minor languages.¹⁰ As a speaker of a minor language in Afghanistan, one would have to know Dari or Pashto, or has a family member that speaks either, in order to open a bank account with a national bank. There is also little trust nation-wide in the national currency, Afghani. Instead many trade in informal currencies, such as gold, Rupees, Rial, and even goats.¹¹ Many other social problems arise when explaining why Afghans lack access to banking, including Islamic banking and property laws, as well as traditions concerning gender roles and a woman's ability to hold assets and property. Mobile money was created to address problems with access and rurality, but would do little to overcome barriers like illiteracy or gender bias in property ownership.

Mobile Money- A Brief Overview

This section will provide a brief overview of how money moves through a mobile money system. Take for example an account with one of Afghanistan's largest mobile banking providers, M-Paisa, which is managed by Vodafone and Roshan. To open an account, one would contact an M-Paisa agent, who would register a Roshan phone as a mobile money account after checking for proper identification and asking the customer to complete the form referenced in Appendix A¹². The new holder of an account would then be able to receive and send e-money transfers, and allow their employer to deposit their salary electronically in to their M-Paisa

⁹ "Afghanistan," The World Factbook

¹⁰ "Afghanistan," The World Factbook

¹¹ Jan Chipchase and Panthea Lee, "Mobile Money: Afghanistan," Institute for Money, Technology, and Financial Inclusion, 2010, 28, <http://designmind.frogdesign.com/files/pdf/Mobile-Money-Afghanistan.pdf> (accessed November 20, 2012).

¹² "Media Relations: Resources," Roshan, 2012, http://www.roshan.af/Roshan/Media_Relations/Case_Studies.aspx (accessed 14 November 2012).

account. To deposit cash or withdraw cash, one would need to find an M-Paisa agent and ask them to convert their electronic savings in to the amount of cash they desire¹³. If that agent does not have the full amount of funds needed or is not available, the subscriber in question will not be able to convert their electronic savings in to cash. One cannot make transactions if cell phone service is interrupted or if they do not have access to a cell phone. There is no actual interaction between the customer's money and a formal banking institution unless the customer transfers their money to a different bank account- and doing so incurs a fee¹⁴. Furthermore, all financial transactions are monitored by the telecommunications company providing service to the mobile phone, and telecommunications companies are not regulated in the way that formal banks are. Since no transactions come with a written record, the system requires trust in both the technology associated with transfers and trust in the M-Paisa agents themselves.

Mobile money did not begin in Afghanistan; it began in markets already saturated with cell phone services. One of the most commonly cited examples of a successful mobile money market is Smart Money, launched in the Philippines in 2001. Now, with 50.9 million subscribers, Smart Money is common and convenient, and has come to include debit and credit card accounts.¹⁵ Kenyans have also seen great success with M-PESA, run by Safaricom, in the last three years, as subscriptions have risen to about 6 million users.¹⁶ Although these countries

¹³ Chipchase and Lee.

¹⁴ Chipchase and Lee, 32.

¹⁵ "What is Smart Money?," Smart Communications, Inc., 2011, <http://www1.smart.com.ph/money/what/> (accessed November 14).

¹⁶ "Annual Report 2009," GSMA Mobile Money for the Unbanked, 2009, 52 <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/03/annualreport200927.pdf> (accessed November 11, 2012).

have comparable histories of inaccessible banking options for the poor, they are not comparable environmentally to Afghanistan. While they both face some security issues, neither has been a severe conflict zone in the last ten years, and neither is being occupied by foreign militaries. They do not face nearly the same levels of poverty and health issues, with the Philippines placed 112th in the human development index, Kenya 143rd, and Afghanistan 172nd¹⁷. The Kenyan and Philippine federal governments also enjoy far more control over companies and institutions operating within their borders. Mobile money has been a success in more developed countries for the past decade, but no country has had a mobile banking presence for more than ten years, and few of those countries have the rule-of-law capabilities to publish impact reports about mobile banking.

Many strategic plans and reports, often written at the behest of the United States or other occupying powers, have failed to reflect the unique challenges and potential pitfalls of mobile banking in Afghanistan¹⁸. The Strategic Plan 2009-2014 for Da Afghanistan Bank cites Smart Money in the Philippines as a model for Afghanistan's involvement in mobile banking¹⁹. However, actual implementation in Afghanistan has been slow-moving and sporadic. Roshan, the largest provider of mobile services, claims to have penetrated 60% of Afghanistan with its mobile services, and has over 3.7 million subscribers to its phones services.²⁰ Roshan also claims to have the potential to reach 97% of all unbanked peoples in Afghanistan, and yet in 2011 M-

¹⁷ "Human Development Report," United Nations Development Programme, 2011, 127, http://hdr.undp.org/en/media/HDR_2011_EN_Complete.pdf (accessed November 22, 2012).

¹⁸ Mardsen, 119.

¹⁹ "Strategic Plan 2009-2014: Fostering Price Stability and Building a Robust Financial System," Da Afghanistan Bank, 2009, 32, <http://www.centralbank.gov.af/pdf/Strategic%20Plan%202009%20-%202014.pdf>, (accessed October 4, 2012).

²⁰ "Mobile Telephony for a Brighter Tomorrow," Roshan, 2012, http://www.roshan.af/Roshan/Media_Relations/Case_Studies.aspx (accessed October 20, 2012).

Paiza only had 200,000 subscribers nation-wide²¹. In reality, mobile money has so far seen significant challenges in achieving scale in Afghanistan, although initial implementation has been completed, and the path is clear for expansion.

The Banking Institutions

To understand the low enrollment in M-Paiza, it is important to survey alternative banking options, which were briefly discussed earlier in this paper. The first is hawala banking. This is a very personal form of banking, in which a network of hawala agents are able to transfer funds between cities using a system of face-to-face passwords and basic security checks to determine the money reaches to correct recipient, and to confirm that agents are being honest. Refer to appendix B for a visual aid of how hawala networks operate and ensure security. Hawala is an historic institution in Afghanistan, with records of Indian and Pakistani agents managing the networks long before the networks were operated by Afghans. With the flight of foreigners during the 1970s in response to the Afghan civil war, hawala became a completely Afghan-dominated agent network²².

Hawala transfers are considered the most low-risk and most accessible banking option by Afghans, according to a survey completed in 2010 by an American consulting company.²³ Much of this trust likely comes from the fact that this is one of the few banking options that has remained a steady institution in Afghanistan throughout the last fifty years of political turmoil

²¹ Melissa Chua, "Banking on the Unbanked," Telecom Asia, May 17, 2011, <http://www.telecomasia.net/content/banking-unbanked?page=0%2C1> (accessed 12 November 2012).

²² Samuel Munzele Maimbo, "The Money Exchange Dealers of Kabul: A Study of the Hawala System in Afghanistan," The World Bank, 2003, 3, http://www.wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2003/10/16/000090341_20031016085357/Rendered/PDF/269720PAPER0Money0exchange0dealers.pdf (accessed November 1, 2012).

²³ Chipchase and Lee, 45.

and widespread violence. This attitude is also reflected in Afghan thoughts about mobile money providers. One Afghan questioned, “come another war, how do we know these new companies won’t just disappear? Afghans don’t have a decades-long relationship with Roshan [M-Paisa], so we don’t know that they won’t run away with our money when times get tough”²⁴. Hawala agents are supposed to register with government regulators, although many skip the formal registrations process as there is a fee²⁵. Instead, agents and their customers operate on the honor system, knowing that word will get around to new potential customers and agents if either party is cheated. Hawala has high penetration and high trust within Afghanistan, and is therefore an established and effective institution.

Banking with Kabul Bank is another option for Afghans, but it comes with many limitations. Kabul Bank has only 17 commercial branches and 45 ATMS in the entire country, most of which are in Kabul itself²⁶. It is therefore difficult using Kabul Bank to transfer money to relatives living in other countries or rural areas, and it is considered more expensive to maintain a bank account than maintain a relationship with a hawala agent or an M-Paisa account²⁷.

Other banks that have small usage and little penetration nationwide include Afghan International Bank, Azizi Bank, and the First Microfinance Bank. As seen in the Afghanistan National Development report from 2008-2009, private sector development and trade are seen as key to Afghanistan’s success in the next decade, but this has yet to transpire within the

²⁴ Chipchase and Lee, 32.

²⁵ Maimbo, 16.

²⁶ Kate Van Brocklin, “Afghanistan’s Superhero: Mobile Phones Fight Crime, Liberate Women and Enrich the Poor,” Global Envision, July 27 2012, <http://www.globalenvision.org/2012/07/27/afghanistans-superhero-mobile-phones-fight-crime-liberate-women-and-enrich-poor> (accessed November 12, 2012).

²⁷ Chipchase and Lee, 45

banking sector, especially in the case of formal western banking institutions.²⁸ Little attention has been paid in the same development documents towards the hawala networks, as they are largely considered outside the purview of the federal government.

The Cell Providers

Despite the relatively high penetration of cell service in Afghanistan, there is alarming low competition within the mobile service market. There are only a few major cell providers in Afghanistan, including Roshan, Etisalat, and Afghan Telecom. Founded in 2005, Afghan Telecom offers an internet service in addition to voice, but does not offer a mobile money service like Roshan²⁹. Etisalat runs its mobile money program, mHawala, as part of a USAID initiative, but it lacks widespread service, and is quite small in comparison to Roshan's M-Paisa. While Afghan Telecom is backed by its connection with the Ministry, and Etisalat is backed by a USAID initiative, Roshan as an independent company in partnership with Vodaphone and therefore carries all risk for mobile money transactions carried out through M-Paisa. Although M-Paisa partners with three banks, Azizi Bank, Afghan International Bank, and the First Microfinance Bank, the actual assumption of risk that a partnership is supposed to ensure is tenuous³⁰. The banks are Roshan's partners in that a user of M-Paisa is able to use their mobile money subscription to transfer money to an account with one of those banks. However, M-Paisa is still considered a "non-bank entity" If M-Paisa was to fail or encounter problems with serving their

²⁸ "Islamic Republic of Afghanistan: Afghanistan National Development Strategy: First Annual Report (2008/09)," International Monetary Fund, 2009, http://www.cooperazioneallosviluppo.esteri.it/pdgcs/italiano/speciali/Afghanistan2011/Pdf/afghanistan_and_report2008-2009.pdf (accessed October 14, 2012).

²⁹ "Products and Services," Afghan Telecom, 2012, <http://www.afghantelecom.af/> (accessed November 15, 2012).

³⁰ "Strategic Plan 2009-2014: Fostering Price Stability and Building a Robust Financial System"

customers, there would be no other service to turn to. And as growth in the market is slow, it does not seem likely that another company will launch a mobile money program soon.

Roshan is also not truly an Afghan venture. 51% of the company's shares are owned by the Aga Khan Fund for Economic Development, a privately financed fund in the name of Aga Khan IV, the current Imam of Nizari Ismailism^{31/32}. This sect of Shia Islam is not directly related to a certain region or ethnicity, and its followers inhabit countries throughout the world. Aga Khan is responsible for significant development projects throughout the Middle East and Islamic world. 36.75% of Roshan's shares are owned by Monaco Telecom, the main telecommunications provider in Monaco.³³ Lastly, 12.25% of Roshan is owned by TeliaSonera, a telecommunications company that operates in several European countries and whose major stakeholders include the Swedish and Finnish governments³⁴. Although international investment and private ventures are something that Afghanistan would like to attract in the coming decade, allowing the only banking option for most Afghans to be a company owned entirely by foreign investors may create negative long-term effects in the banking industry³⁵. A domestically owned and operated telecommunications venture would ensure that profits and stakeholder concerns would benefit Afghanistan as a whole. While mobile money as operated

³¹ "Bringing Together Innovation and Global Expertise," Roshan, 2012, http://www.roshan.af/Roshan/About_Roshan/Shareholders.aspx (accessed October 31, 2012).

³² G. Pascal Zachary, "The Aga Khan, a Jet-Setter who Mixes Business and Islam," The New York Times, July 9 2007, http://www.nytimes.com/2007/07/09/business/worldbusiness/09ihtkhan.4.6569846.html?pagewanted=all&_r=0 (accessed November 7 2012).

³³ "Bringing Together Innovation and Global Expertise"

³⁴ "TeliaSonera," Roshan, 2012, http://www.roshan.af/Roshan/About_Roshan/Shareholders/TeliaSonera.aspx (accessed November 12, 2012).

³⁵ "Islamic Republic of Afghanistan: Afghanistan National Development Strategy: First Annual Report (2008/09)," 11.

by Roshan may increase Afghans' opportunity to use banking services, it does not increase their nation's opportunity for successful Afghan-owned enterprises.

The Regulators

A basic tenant of banking is regulation. Without oversight, banks can create large booms and busts in even the most stable economy, and while they can shield some customers, regulation is necessary to curb risk and speculation. However, Afghanistan's regulatory agencies are all either newly founded or lack power. Banks are regulated by Da Afghanistan Bank. But mobile money is not considered a banking institution. Instead, it falls under the Afghanistan Telecom Regulatory Authority (ATRA) created in 2005 as part of the Telecom Law.³⁶ Today, ATRA is "actively monitoring and controlling the telecom sector to ensure compliance with the law and license conditions" according to a National Defense University report in 2008³⁷. However, a license is only required to sell telecommunications services, and no additional licensing is needed to provide financial services³⁸. This is not to say that there is no concern within the Afghan central bank about a lack of regulation. Da Afghanistan Bank's 2009-2014 Strategic Plan includes caution about mobile money. While it acknowledges the opportunity for growth within the sector, the report also states:

The opportunities provided by mobile banking must be carefully weighed against the regulatory risks: credit risk, operational risk, legal risk, liquidity risk and reputation risk.

³⁶ Larry Wentz, Frank Kramer and Stuart Starr, "Information and Communication Technologies for Reconstruction and Development," Center for Technology and National Security Policy: National Defense University, January 2008, 12, <http://www.carlisle.army.mil/DIME/documents/Info%20and%20Comm%20Afghan%20NDUJan08.pdf> (accessed November 12, 2012).

³⁷ Wentz, Kramer and Starr, 13.

³⁸ "Afghanistan," OpenNet Initiative, May 8 2007, http://opennet.net/research/profiles/afghanistan#footnote24_s1wm6ua (accessed November 13, 2012).

In addition to the regulatory risks mobile banking requires careful consideration of e-investors risks i.e. that an unlicensed, unsupervised non-Bank entity will collect repayable fund from the public in exchange for e-money and will either steal the money or use it imprudently, resulting in insolvency and the inability to honor customer claims³⁹.

The report acknowledges that it is the responsibility of the Da Afghanistan Bank to implement anti-fraud and regulatory procedures, but does not outline a concrete plan for this implementation. So not only is mobile money unregulated by the Afghan Governments' telecommunications governing bodies, but lacks regulation under financial laws as well.

Afghanistan's government is not the first to be concerned with the mobile money industry operating within its borders. In 2008 the State Bank of Pakistan published a document entitled "Branchless Banking Regulations for Financial Institutions Desirous to Undertake Branchless Banking," which outlines what is and what is not acceptable for telecommunications companies wishing to undertake a mobile money venture in Pakistan⁴⁰. It emphasizes that telecommunications companies must strongly involve actual banks in the creation and operation of a mobile money brand, and "explicitly forbade mobile network operators from offering mobile financial services. In addition, it specified parts of the value chain—for example, risk management—that the bank could not outsource, and others, such as agent network management, which it could."⁴¹ The State Bank of Pakistan saw that the Pakistani economy was

³⁹ "Strategic Plan 2009-2014: Fostering Price Stability and Building a Robust Financial System," 32.

⁴⁰ "Branchless Banking Regulations for Financial Institutions Desirous to Undertake Branchless Banking," Banking Policy and Regulations Department: State Bank of Pakistan, March 31 2008, http://www.sbp.org.pk/bprd/2008/Annex_C2.pdf (accessed November 31, 2012).

⁴¹ Neil Davidson, "Mapping and Effectively Structuring Operator-Bank Relationships to Offer Mobile Money for the Unbanked," GSMA: Mobile Money for the Unbanked, 2012, 18,

at risk because of the unregulated aspects of mobile money, and took steps to regulate them. Additionally, it shows the perceived risk of allowing a telecommunication company with no experience in handling financial services to offer mobile money services without significant support from a bank. This document could serve as a model to the Afghan government if it attempts to regulate mobile money, and demonstrates best business practices to telecommunications companies concerned about their impact on local communicates.

In addition to the challenges already described, the Afghan government lacked support from the start in regulating large sectors of its economy. According to Peter Mardsen, the Coordinator of the British Agencies Afghanistan Group from 1989 to 2005, a group which supports development efforts in Afghanistan, “a further major priority of the US Government was to ensure that the newly create Afghan Government would establish a regulatory framework through which private sector investment could be maximized.”⁴² Since the US “orchestrated outcomes without necessarily consulting the Afghan Government or the wider group of donors” it is clear that this decision should be put under more scrutiny⁴³. Without such a large influence pushing the Afghan Government towards deregulation, perhaps the Afghan Government would be able to regulate mobile money more effectively.

The Hidden Hand of Telecommunications

As demonstrated by the United States’ influence on the Afghan Government, the lack of regulation can be explained by factors other than a lack of ability or motivation within the

<http://www.gsma.com/mobilefordevelopment/wpcontent/uploads/2012/03/mappingandeffectivestructuringfinal2643.pdf> (accessed November 12, 2012).

⁴² Mardsen 119

⁴³ Mardsen, 118.

Afghan government. Clearly there is concern over the issue, or formal legislation including ATRA would never have been created and concern about mobile regulation would not have been included in the central bank's Strategic Plan. Telecommunications is a trillion dollar industry worldwide, and therefore is often represented by powerful trade organizations. There are many telecommunications associations within the developed world, but the GSM Association, which according to Telecom.com "has evolved to become one of the most powerful trade associations in the world, lobbying governments on everything from tax policy to pricing strategy and producing feature-length documentaries on the improvements that mobile has brought to the lives of people across the world," focuses on issues in the developing world⁴⁴. One of the divisions of GSMA, Mobile for Development, runs a range of programs using the technology of their clients. And while the work for this department is development-based, it surely increases profits and creates markets for GSMA's primary interest, its clients.

GSMA Mobile for Development has a program for almost every aspect of development; including agriculture, closing the gender gap, minimizing environmental impact, increasing overall health, education, and increasing access to electricity⁴⁵. Although it is undeniable that much of the developing world is struggling in these areas, every one of GSMA's solutions to these problems involves buying a cell phone and paying for service. The programs' successes are usually measured by the number of users or new subscriptions, and rarely by standard development measures such as GDP per capita, average lifespan, or other indicators that would be common in the field. In addition to working in Afghanistan, Mobile for Development

⁴⁴ "Michael O'Hara, Chief marketing Officer, GSM Association" [Telecoms.Com](http://www.telecoms.com/13386/michael-o%E2%80%99hara-chief-marketing-officer-gsm-association/), 2012, <http://www.telecoms.com/13386/michael-o%E2%80%99hara-chief-marketing-officer-gsm-association/> (accessed November 6 2012).

⁴⁵ "Mobile for Development Programmes," [GSMA: Mobile for Development](http://www.gsma.com/mobilefordevelopment/programmes/), 2012, <http://www.gsma.com/mobilefordevelopment/programmes/> (accessed November 31 2012).

operates in 30 countries across Latin America, Asia, and Africa. They exclusively work in countries with poor standards of living and undeveloped economies, and are poised to exert their position as “one of the most powerful trade associations in the world.”⁴⁶ Their program Mobile Money for the Unbanked operates in several countries, including Afghanistan, and has “allocated \$5 million of funding across 19 operators for mobile money pilots, innovations and scaling” since its creation in 2009.⁴⁷ Therefore, GSMA has the potential to exert a large amount of influence the telecommunications sector of any country it chooses through this program. These grants and programs may be helpful to Afghans, but it is important to remember that GSMA’s clients are not Afghans, but multi-national telecommunications companies.

GSMA clearly advocates for the least amount of regulation possible when it comes to mobile money. A document published by GSMA in 2011 entitled “Regulating Non-Bank Money Service Providers” clearly outlines the intent of the association to limit regulation of mobile money enterprises. The document argues that “a bank license, and the supervisory obligations that go with it, would be unsuitable for [payment providers or e-money issuers], because they, like mobile money providers, do not engage in the risky business of financial intermediation: converting customer deposits into loans. Money that they hold on behalf of customers and agents is entrusted to a regulated bank”.⁴⁸ M-Paisa would be considered a “payment provider or e-money issuer”, and therefore GSMA would argue that there should be little regulation of the largest mobile money service provider in Afghanistan. The central problem with a lack of

⁴⁶ “Michael O’Hara, Chief marketing Officer, GSM Association”.

⁴⁷ “MMU Programme Overview: The Case for Mobile Money,” GSMA: Mobile for Development, 2012, <http://www.gsma.com/mobilefordevelopment/programmes/mobile-money-for-the-unbanked/programme-overview/> (accessed October 4, 2012).

⁴⁸ Neil Davidson, “Regulating Non-bank Mobile Money Service Providers,” GSMA: Mobile for Development, August 25 2011, <http://www.gsma.com/mobilefordevelopment/regulating-non-bank-mobile-money-service-providers/> (accessed November 1, 2012).

regulation in a country like Afghanistan is that it weakens already weak institutions. The current federal government in Afghanistan is the first centralized government the country has seen in the last century, and to make that government's rule legitimized, its departments have to be able to assert control over foreign companies and organizations within its borders. With the powerful lobby of telecommunications behind it, mobile money undermines the ability of the Afghan Government to regulate and govern industry effectively.

Security Concerns

Security is a persistent concern for most operations that take place in Afghanistan, and it should be a concern for mobile money operators as well. Cell towers are not infallible, and are just as open to physical and cyber-attacks as any other system.

The Taliban, one of the leading security concerns for the Afghan military, has been known to target cell towers; "sporadic attacks on cell-phone towers by the Taliban have crippled coverage in parts of the country".⁴⁹ Without reliable cell service, mobile money could potentially put clients in a position from which they cannot access needed funds. Furthermore, the Taliban has been known to use cell towers as a means of controlling civilian populations. A New York Times article profiling this common occurrence explains that "under pressure from the Taliban, the major carriers turn off their signal towers, effectively severing most of the connections to the rest of the world... this now occurs in some portion of more than half the provinces in Afghanistan, and exemplifies the Taliban's new and more subtle ways of asserting

⁴⁹ Nidhi Subbaraman, "Can Mobile Banking Take Off in Afghanistan?," The Christian Science Monitor, February 25, 2011, <http://www.csmonitor.com/Innovation/Latest-News-Wires/2011/0225/Can-mobile-banking-take-off-in-Afghanistan> (accessed November 4, 2012).

themselves”.⁵⁰ See appendix C for a map of areas affected by these attacks.⁵¹ Aside from demonstrating the still-elevated security risks that face most populations, this article shows the tenuous ability of mobile money to truly serve the needs of many Afghan populations. While cell service may be occasional, the Taliban holds a significant amount of influence over cell carriers. And since cell carriers like Roshan are responsible for financial transactions of their M-Paisa clients, in effect the spread of mobile banking would increase the Taliban’s ability to influence Afghan financial services.

Cyber-security remains a challenge for the Afghan government. While much focus is placed on providing the opportunity for internet connectivity to the population, less has been done in implementing basic cyber-security standards. The Ministry of Communication and Information Technology (MCIT) would be the department within the Afghan government responsible for establishing cyber security, however the “National Cyber Security Strategy and Plan and the establishment of a National Cyber Security management structure has been under consideration by the MCIT for some time” but has not yet been completed.⁵² Although some systems within Afghanistan, such as classified networks on American military bases maintain strict employee cyber security training and practices, “much remains to be done to improve the cyber security posture of the government and public and private networks, including public

⁵⁰ Alissa J. Rubin, “Taliban Using Modern Means to Add to Sway,” The New York Times, October 4, 2011, <http://www.nytimes.com/2011/10/05/world/asia/taliban-using-modern-means-to-add-to-sway.html?pagewanted=all> (accessed November 30, 2012).

⁵¹ Alissa J. Rubin, “Turned-Off Cellphone Towers,” The New York Times, October 4, 2011, <http://www.nytimes.com/interactive/2011/10/05/world/middleeast/turned-off-cellphone-towers-in-afghanistan.html?ref=asia> (accessed November 30, 2012).

⁵² Wentz, Kramer and Starr, 27.

private cooperative arrangements” which would include telecommunications networks.^{53/54}

Using a digital system to serve the financial needs of Afghans when it is unlikely that this system will be secure is not an acceptable service for a company to provide.

Furthermore, mobile phone security is less reliable than the security of a physical bank or hawala agent. While hawala agents use a series of passwords and established personal trust in face-to-face interactions to identify users and agents, and banks are required to verify identity by law, mobile phones present more opportunities for theft and misrepresentation. Not only are many Afghans not well-exposed to the conversations about mobile security that western users are, but mobile phones in general pose several basic security risks. Three general problems with mobile security that add risk to conducting financial transactions on a mobile phone are “the lack of any notion of security on the transmission medium, the lack of guaranteed integrity of data stored on mobile devices in the environment, and the real possibility of theft of a user’s mobile device”.⁵⁵ Furthermore, as can be seen in the application for an M-Paisa account (see appendix A) there is minimal verification of identity and trust, the application simply asks for a national ID number, photo identification, name, address, and mobile number.⁵⁶ False identity is easy to obtain in Afghanistan, as “anyone can get [an ID card] on the street for AFN 500 (USD 11), or by knowing the right person”⁵⁷. So identity and verification are two major concerns lacking within the Afghan mobile money industry.

⁵³ Wentz, Kramer and Starr, 27.

⁵⁴ United States Marine Corps Lt. Col Shawn Lowry.

⁵⁵ F. Perich, A. Joshi, and R. Chirkova, “Data Management for Mobile Ad- Hoc Networks,” in Enabling Technologies for Wireless E-Business, ed. Weidong Kou and Yelena Yesha (Berlin: Springer, 2006), 155.

⁵⁶ “M-Paisa Reg Form,” Roshan, 2012, http://www.roshan.af/Roshan/Media_Relations/Case_Studies.aspx (accessed November 3, 2012).

⁵⁷ Chipchase and Lee, 31.

Recommendations and Conclusions

Despite the lack of ownership, security concerns, profusion of lobbying, and push for deregulation within mobile money, according to western development organizations, banking is essential to personal economic development. According to a World Bank report, “without inclusive financial systems, poor people must rely on their own limited savings to invest in their education or become entrepreneurs—and small enterprises must rely on their limited earnings to pursue promising growth opportunities. This can contribute to persistent income inequality and slower economic growth.”⁵⁸ It is important to remember, however, that banking does not create money. While in some cases having a formal bank account can keep money safer and allow for more consistent lending, there are always alternative methods that are usually part of a country’s cultural tradition, such as lending from trusted friends and family, or storing savings in a religious center or local institution. Mobile money is not the only option for Afghans wishing to use financial services.

Afghanistan has potential beyond mobile money to provide itself with access to banking. The hawala network is not only widely trusted, but has an established mode of operation that could easily be understood and analyzed by Afghan Government officials. As it is successful with little regulation, perhaps the Afghan Government could limit its own involvement, but transition in to an official hawala system. With government guarantees of service and reliability, hawala agents could gain more business and engage riskier customers, thereby increasing financial inclusion. Hawala banking is an Afghan enterprise that arose out of serving the needs of Afghans, and therefore is a more suitable banking option than M-Paisa; with hawala, all the


⁵⁸ Demircuc-Kunt and Klapper, 1.

needs of our Afghan soldier are met. Networks bridge the gap between the rural and the urban, and connect families across dangerous distances. Agents are consistently Afghan, and have a motive to ensure their industry leads to a brighter future for their country.

If mobile money continues to operate in Afghanistan, then the Afghan government should take all necessary steps to ensure that risk is mitigated, the industry is regulated, and that foreign companies are not able to take advantage of a population as disenfranchised as the Afghans. Solid government and strong institutions will help the Afghan state avoid civil conflict and corruption, ensuring a higher quality life for many Afghans. International actors have been successful in intervening in Afghan affairs, but less successful than necessary in providing the Afghan government with the tools it needs to operate effectively on its own. Mobile money represents the danger posed to Afghanistan when it follows foreign directions and incentives; by taking responsibility for the effect that finance and private enterprise has on its own citizens, the Afghan Government may be able to ensure its citizens the prosperity and security that they have lacked for half a century.

Appendices


Appendix A- Roshan M-Paiza Registration Form



د پیسو خواله د موبایل له لپارې

Agent Name:

Till No:

Powered by  ملاتړ کوونکی

فورمه راجستريشن مشتری ام - پیسه

د ام - پیسه د پېرودنکي د راجستريشن فورمه

M-Paiza Customer Registration Form

0 7 9

شماره ثبت

محل صدور

صفحه

جلد

شماره تېلفون موبایل:

د موبایل تېلفون شمېره:

Mobile Phone Number:

شماره تذکره: (برای افغان)

د تذکرې شمېره: (د افغان لپاره)

Passport or NID No.:

نام مکمل:

بشپړ نوم:

Full Name:

اسم پدر:

پلار نوم:

Father name:

تاریخ تولد:

د زیږېدو نېټه:

Date of Birth (dd/mm/yyyy):

محل تولد:

د زیږېدلي ځای:

Place of Birth:

منبع سرمایه:

د سرمایې سرچینه:

Source of Funds:

آدرس:

پته:

Address:

نام استخدام کننده:

د گومارونکي نوم:

Name of Employer (if applicable):

وظیفه:

دنده:

Occupation:

معلومات خلاصه درمورد استفاده از ام - پیسه:

د ام - پیسه څخه د گټې اخستو په هکله لنډ معلومات:

Brief description of what M-Paiza will be used for:

در صورت فوت شدن صاحب صورت حساب، شخص ذیل می تواند از صورت حساب استفاده کند.

د صورت حساب د خاوند د مړینې په صورت کې، لاندې شخص کولای شي له اړونده حساب څخه گټه واخلي.

In case of death, the following person will be the account's beneficiary

اسم:

نوم:

Name:

اسم پدر:

پلار نوم:

Father name:

قرابت با دارنده حساب:

د حساب لرونکي سره اړیکه:

Relationship to the account holder:

آدرس:

پته:

Address:

0 7 9

شماره تېلفون:

د تېلفون شمېره:

Phone Number:

For Yes (v) - For No (X)

د سم ځواب لپاره (v) - د نغې لپاره (X)

برای جواب موافق (v) برای جواب ناموافق (X)

1. Are you in any way politically affiliated? ☐

2. Did you attach a copy of your ID? ☐

3. Did you attach your photo? ☐

4. Do you have an existing M-Paiza account? ☐

5. Are you at least 18 years of age? ☐

۱. آیا شما با امور سیاسی وابستگی دارید؟ ☐

۱. آیا تاسې له سیاسي چارو سره تړاو لرئ؟ ☐

۲. آیا کاپي کارت هویت خود را ضمیمه کرده اید؟ ☐

۲. آیا د خپل پېژند کارت کاپي مو ضمیمه کړې ده؟ ☐

۳. آیا تصویر خود را ضمیمه نموده اید؟ ☐

۳. آیا خپل تصویر مو ضمیمه کړی دی؟ ☐

۴. آیا فعلاً حساب ام - پیسه دارید؟ ☐

۴. آیا اوس ام - پیسه حساب لرئ؟ ☐

۵. آیا شما حداقل هجده ساله هستید؟ ☐

۵. آیا تاسې لږ تر لږه اتلس کلن یاست؟ ☐

• تصدیق میدارم اینکه بنده مالک شماره تلفن راجستر شده فوق الذکر بوده و شرایط و ضوابط ام پیسه که بالای حساب ام قابل تطبیق میباشد خوانده، دانسته و می پذیرم و به تمام شرایط و ضوابط لازم الاجرا که وقتاً فوقتاً تجدید میگردد خود را مقید میدانم من می دانم که تخلفی از شرایط و ضوابط ام - پیسه باعث معطل شدن یا از بین رفتن حساب ام میگردد.

• تصدیق کوم چې زه د پورتنۍ تېلفون شمېرې راجستر شوي څښتن یم او د ام - پیسه شرایط او ضوابط چې زما پر حساب د پلي کېدو او د تطبیق وړ دی لوستلی، پوهیدلی او ور سره موافقه لرم او ځان د هغو د اجرا وړ شرایطو او ضوابطو منلو ته ژمن ټولم، چې وخت نا وخت نوی کیږي او پدې پوهیږم چې د ام - پیسه د شرایطو او ضوابطو څخه سرغړونه زما د حساب د کنګل کېدو او بندیدو لامل گرځي.

• I acknowledge that I am the registered owner of the above mentioned number and I have read, understood and accepted the M-Paiza Terms and Conditions applicable to my account, as amended from time to time and agree to be bound by them. I understand that violation of the M-Paiza Terms and Condition may result in suspension or termination of my account

امضاء:

لاسلیک:

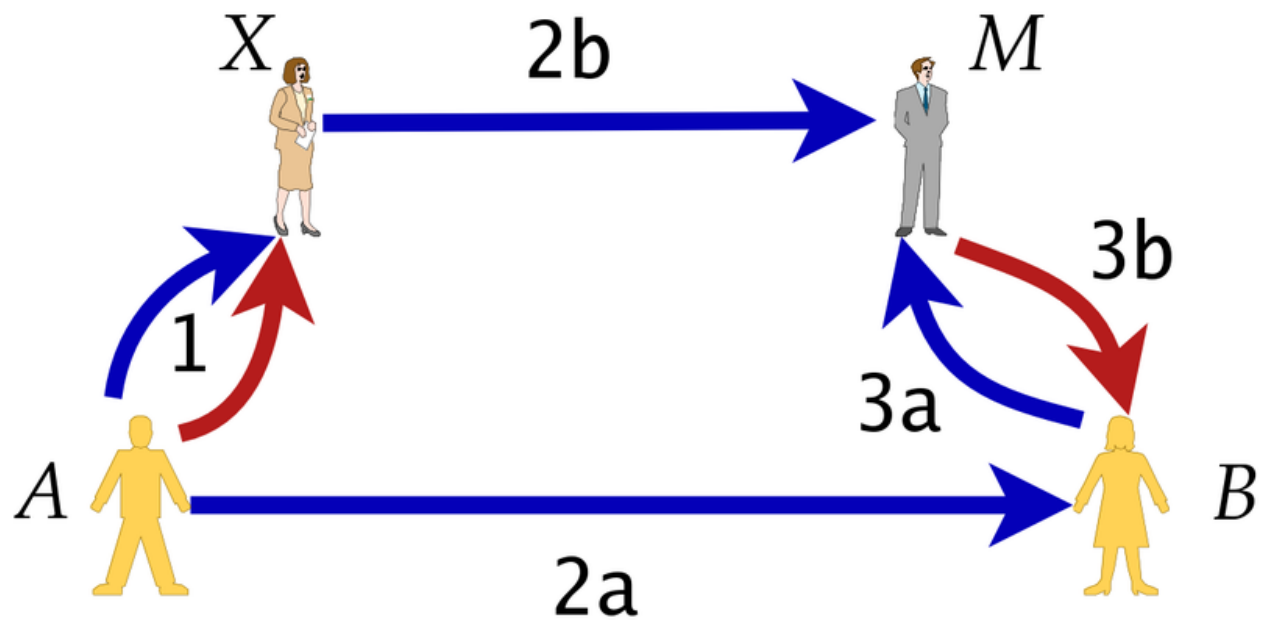
Signature:

تاریخ:

نېټه:

Date:

Appendix B- The Hawala Network



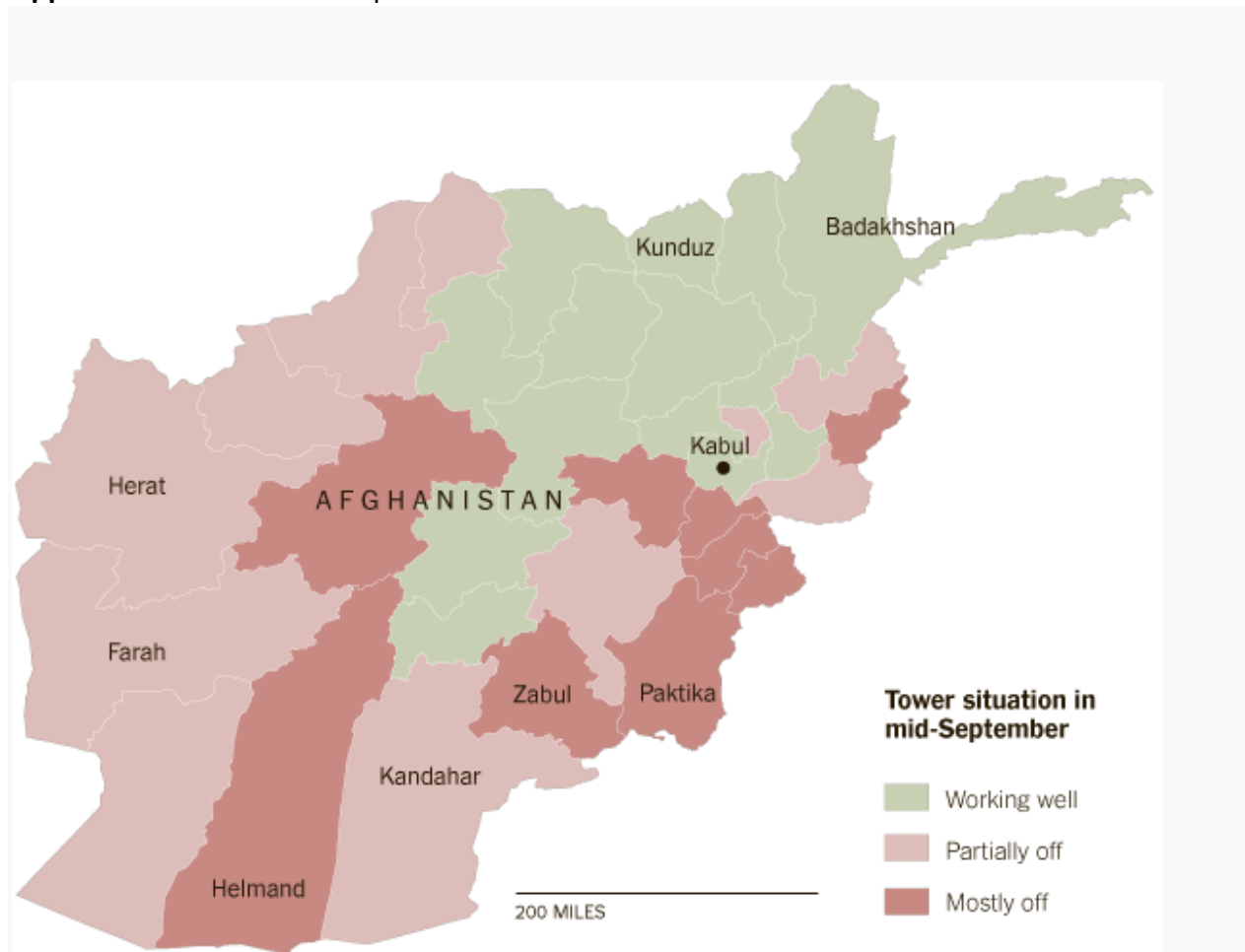
59

- 1. A hands the money (red) to his hawaladar X and also tells him the code word (blue).
- 2a. Then, A tells B the code word.
- 2b. Independent of this, X tells the code word to M.
- 3a. B tells the code word to M...
- 3b. ...which shows to M that B is a legitimate receiver of the money, so he hands over the money to B.

Legend: blue = shared code word is being told, red = money is handed over

⁵⁹ <http://en.wikipedia.org/wiki/File:Hawala.png>

Appendix C- Turned-Off Cellphone Towers



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